

A Peculiar Variety of Meteors. By W. F. Denning.

On the morning of April 20, at 1^h 36^m A.M., while watching the progress of the Lyrids I saw a remarkable meteor, projected apparently on the stars ϵ and δ of *Serpens*, as it rose upwards with great rapidity in the south. The meteor was about the third magnitude, but the singularity about it was its marvellous velocity and seeming nearness. It appeared to be in the air, a few yards distant, and I believe its path, extending (as it instantaneously impressed me) over some 16° on the background of the sky, must have been traversed in less than the twentieth part of a second. Of course there is a great difficulty in estimating such short intervals, but I feel confident the duration was even more transient than that assigned.

Now and then I have observed similar meteors before. They immediately strike one by their close proximity and enormous velocity. They are mere gleams of pale white light, which have little analogy to ordinary shooting stars, and suggest an electric origin, though I do not know whether the marvellous quickness with which they flash upon the eye is not to be held responsible for the sensation of nearness. They are somewhat rare, and one may watch through several whole nights without a single example, but, as far as my memory serves, I must have witnessed some scores of these meteoric flashes. I never register the paths; they are so rapid as to make but a vague impression on the retina, and the direction is necessarily much involved in doubt. As to the meteor of April 20, it ascended in *Serpens* from the western boundaries of *Scorpio*, and probably diverged from a radiant near the bow of *Sagittarius*. It was the only one I saw of the kind alluded to, or which could have belonged to a radiant so low in the S.E. amongst eighty-one meteors recorded during the nights of April 18, 19, and 20, 1885.

I have consulted several catalogues for notices of abnormal meteors such as the one described, but in most cases there is an absence of individual notes, and I have failed to gather much evidence of the kind required. But a most excellent instance, and I think the only one, is referred to in Col. Tupman's catalogue of nearly two thousand shooting stars observed by him while cruising in the Mediterranean during the years 1869-71. The particulars are:—

1870, January 9, 14^h 59^m; mag. 3; path from 169°+20° to 157°-10°; length 31°; duration 0.1 second. "An instantaneous flash; seemed to be in the air, quite near. Very curious."

It will be seen that Col. Tupman's description is very similar to my own. Though his meteor had a path of no less than 31°, he estimated the duration as only the tenth of a second.

On the whole I incline to the belief that meteors of this abnormal class give the idea of great nearness as the result of their astonishing speed, and that they will be invariably found

directed from radiants close to the Earth's apex. Their appearance, however, is such as to vividly impress the observer as to their special character. It therefore seems desirable to mention the circumstances, so that workers in this department may record such further instances as they may notice, notwithstanding the uncertainty attached to the path directions of such very transient phenomena. It is just possible they may indicate a form of meteoric display essentially different to that commonly understood.

Bristol: 1885, April 27.

Observing Weather. By Rev. S. J. Johnson.

In the last report of U.S. Naval Observatory, Washington, it is stated (p. 9): "A record has been kept by the various observers and the watchmen of the condition of the sky as regards seeing. From this, it appears that but 126 nights were clear enough for observing, and of these but 38 are recorded as good, the remaining 88 being poor or indifferent." For the last quarter of a century I have recorded the number of evenings fit for observation in the western parts of England. In this respect we appear somewhat less favoured than the Americans. By evenings fit for observation, it is inferred that the sky was clear, or with a few small passing clouds, till about 11^h, or else thoroughly clear for a full hour. Clearness of the atmosphere alone is regarded in the following list, not suitability for dividing very close double stars.

The number of nights was as follows:—

In 1859 = 60 nights.			In 1868 = 62 nights.			In 1877 = 60 nights.		
1860	44	"	1869	58	"	1878	86	"
1861	46	"	1870	112	"	1879	71	"
1862	46	"	1871	98	"	1880	96	"
1863	47	"	1872	90	"	1881	110	"
1864	83	"	1873	82	"	1882	90	"
1865	82	"	1874	113	"	1883	101	"
1866	77	"	1875	100	"	1884	100	"
1867	55	"	1876	115	"			

To give each separate month would occupy space, but it may be stated that the number of clear nights varied from 18 in August 1870 and 17 in May 1876, to one night only in September 1866 and January 1869.

*Melplash Vicarage,
Bridport: April 7.*
